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Western States Petroleum Association
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January 31, 2006

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Re. Western States Petroleum Association's Comments on the Draft CalEPA Climate Action Team (CAT) Report to the Governor and Legislature – December 8, 2005

The Western States Petroleum Association (WSPA) is a nonprofit trade association representing 26 companies in the energy business that explore for, produce, transport, refine and market petroleum and petroleum products, as well as other products, in California and five other western states.WSPA is pleased to provide comments on the Climate Action Team's draft December 8, 2005 report. We'd like to recognize the intensive work of the dedicated staff and members of the CAT, and thank them for their efforts. However, the issues and policies addressed in the report could have vast positive or negative impacts on California. It is a matter that needs thorough evaluation. We are deeply concerned about both the level of content and the tone of the report. The details that follow will amplify our concerns.

We have many questions about, and take issue with, the ways in which both costs and benefits are analyzed and calculated. We believe in its present form, the CAT report requires considerable more work and could greatly benefit from more dialogue with the stakeholders. Its adoption in this form would not benefit the state and people of California.

The climate change debate focuses largely on the use of energy – fossil fuels primarily. Therefore, WSPA would like to first provide the same important messages that our industry provided last year during the development of the new 2005 Integrated Energy Policy Report.

To start, California's Energy Policy needs to include a balance between environmental protection and economic health and growth. That balance will be required for success in every area of California's energy plans and implementation programs, including this one.

Meeting the state's energy needs over the next several decades will require several key elements. They include a strong base of petroleum supply, growing the base of alternative and renewable fuels, and a prudent reduction in the rate of growth of energy demand through conservation and efficiency. Policies should not inhibit the marketplace from ultimately determining how to

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bridge from today's petroleum fuel-dominated economy to an economy fueled by a more diversified energy supply portfolio.

The state should allow transition to a new, more diverse energy system to take place in a rational, reasonable, cost-effective and technically feasible manner. Policies that encourage a more diverse energy system must also support policies that encourage the investment and development necessary to provide the diverse energy system. We are pleased that the report mentions the state wants to ensure any government-derived GHG program retains the state's competitiveness, along with businesses and job.

However we are concerned that the authors may have been provided with an overly optimistic picture of job creation resulting from an aggressive state GHG program. Another real concern we have is the extent to which these efforts by the state to implement restrictive programs to reduce GHG's may lead to a further erosion of the reliability of the existing energy system.

The opening paragraphs in the Climate Action Team report discuss the ranking of California as one of the world's leading producers of greenhouse gas emissions. What it neglects to point out is that the state is also a world leader in economic strength, based on its existing infrastructure, manufacturing base and knowledgeable private investors. The other element that is not mentioned in the initial part of the report is that the state also is a leader in both energy efficiency and renewable fuels use.

Although the report recognizes that addressing global climate change is a global issue, the report seems to dismiss the economic consequences of stepping out front of the rest of the country with aggressive California reduction targets. It instead relies on postulated benefits that may accrue from GHG technology development in the state.

WSPA supports efforts in research and development of this kind of technology, and believes new GHG technology will be essential for sustained reductions in GHG emissions. However, we do not believe it should be at the expense of existing businesses in the state, nor should it evolve into a subsidization program funded by existing businesses. WSPA believes that more innovative efforts to encourage research and development should be discussed in the report.

We recommend that those responsible for instituting and implementing a credible California GHG policy in the state be entirely sure before embarking on some of the concepts in the CAT report, that these pathways are truly good public policy and will not have unintended negative consequences for the state and its consumers.

To clarify two points:

WSPA supports the Governor's intention to address greenhouse gas emissions and global climate change and, we support energy conservation and efficiency measures.

We want to work with you to develop cost-effective, energy efficiency measures that reduce greenhouse gas intensity, as well as creating support for research into and development of those technologies that balances environmental protection and economic health and growth.

WSPA supports the CAT's recommendation for early credits as well as voluntary programs that address global climate change and greenhouse gas emissions reductions. Our members have for

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many years been involved in voluntary actions that have reduced – by a significant amount – GHG emissions from their facilities.
WSPA is concerned about how the state deals with the possible effects of global climate change on energy supplies. If the state chooses to use features like mandatory state cap and trade programs, this may not be as economically sound, nor have the same public policy benefits as, a more flexible, cost-competitive approach to managing that issue.

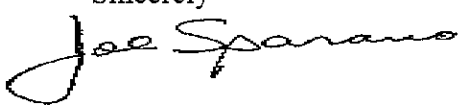
We are also concerned about the effectiveness of and possible economic harm from local, state and regional efforts that are not part of a national or international program. Using that approach could put California businesses at a competitive disadvantage.

WSPA supports the development of national and international greenhouse gas policies, programs and solutions. We also support voluntary reporting programs or audits. We prefer those, of course, to be nationally or internationally based.

WSPA believes that any major program must have a clear requirement for tracking its performance to ensure its strategies are cost-effective and achieving its stated goals. The CAT recommendation should include: 1) clear metrics of reductions and costs, 2) an indicator to assess impacts on the economy, 3) a metric that will serve as an alarm to trigger review of its strategies, and, 4) how the results will be tracked and reported.

We appreciate this opportunity to comment on the CAT report, and look forward to much more collaborative dialogue and debate on this subject. WSPA's detailed comments on the report fall are contained on the following pages, and fall within eight issue categories: Economic Analysis, Mandatory Emissions Reporting, Public Goods Charge for Transportation, Energy Efficiency, Bio-fuels Mandates and Alternative Fuels, Caps, Oil & Gas Venting and Leaks, and Port Electrification.

Sincerely



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Detailed WSPA Comments

Economic Analysis

The CAT report is essentially recommending to policymakers that the state move forward with various GHG reduction strategies without a detailed, peer-reviewed economic analysis. Mention is made that additional analysis is ongoing and will be updated every two years. However a complete economic analysis should be the cornerstone of any recommendations that are provided to the Governor and the legislature in February.

We have of necessity kept our comments brief, due to the very short period of time allowed for interested parties to actually review any of the in-depth inputs and assumptions to the macroeconomic report. The inadequacy of the review period has been typical of what the public experienced during the CEC's Climate Action Advisory Committee activities, and has continued throughout the CAT process.

This is unfortunate, since we believe public support of the state's concepts can only come about through allowance of adequate review of materials, sufficient discussion amongst the affected parties, and resolution of issues.

In an initial review of the January 5th and January 12th postings of Chapter 8, plus the subsequent release of "input" data, some serious questions were raised about the credibility of the reported macroeconomic impacts.

The E-DRAM modeling framework requires clear and specific characterization of how each of the 44 climate strategies would be implemented before a useful macroeconomic assessment can be attempted. However, the draft Chapter 8 makes it obvious that clear, specific and complete characterization for most of the strategies does not yet exist.

Even though this macroeconomic assessment is labeled "preliminary," the huge gap between required model input and available strategy evaluation details makes the credibility of the macroeconomic impact estimates highly questionable. Additionally, the simplistic reporting of impacts in the draft Chapter 8 does not even extend to the most basic measure of economic impact – the state's overall economic output.

Earlier E-DRAM analysis of the proposed "Pavley" new vehicle GHG requirements indicated that they would negatively impact the state's economic output. This fact was curiously omitted from the current draft Chapter 8 even as the positive jobs impact of "Pavley" was reported.

Those results, and many others, clearly exist in the E-DRAM modeling runs and are available for inclusion in a rigorous macroeconomic analysis. The absence of even minimal reporting of macroeconomic impacts highlights WSPA's concern over the merits of the reported results and tends to paint the current draft Chapter 8 as an advocacy document, not a report based on solid economic analysis.

To the extent that the analysis has merit, it strongly indicates that some and possibly many of the 44 climate strategies under consideration could have adverse economic impacts. For example, the analysis of the 33 strategies in Table 5-2 posted on January 5th clearly indicates that each

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additional job created under the strategies would reduce California's overall income by $200,000, and that the jobs being created don't pay as well as the jobs being displaced.

Additionally, the E-DRAM analysis needs to explicitly document the extent to which implementation expenditures for each climate strategy result in increased expenditures in California versus increased California imports (e.g., automobiles or ethanol). The former boosts the California economy but the latter does not. Without carefully assessing the import issue, the positive impacts on the state economy will be overstated. Until this information is provided for each climate strategy, the macroeconomic assessment is seriously incomplete.

Overall, the preliminary economic modeling appears to reflect a forced-march analysis necessarily based on guesses because careful analysis of "most" of the 44 individual strategies is not yet complete. The modeling that has occurred clearly makes the case that each strategy needs to be carefully evaluated individually before being included in a macroeconomic assessment. And the results of that macroeconomic assessment need to be reported in a much more comprehensive fashion.

Specific Discussion Points

The text in draft Chapter 8 raises questions about the credibility of the preliminary assessment of the macroeconomic impacts.

- Draft Chapter 8 (version posted 1/12/06) reports the combined impact of 11 strategies from Table 5-1 and 33 strategies from Table 5-2 for a total of 44 separate strategies. Many of these strategies have been described in only very general terms in public documents.
- However, modeling of these strategies in E-DRAM requires exact numeric specification of how these 44 separate strategies would be implemented. Complete analysis leading to these modeling assumptions should be shared with the public to demonstrate the credibility of the analysis.
- In fact, page 1 of Chapter 8 (version posted 1/12/06) indicates, "the cost and potential savings information associated with **most** of the individual strategies **have not yet been fully developed**." (Emphasis added).
- If the details of "most" of the individual strategies have not yet been fully developed, what were the modeling inputs for the E-DRAM model? How credible can the macroeconomic impact results be if the E-DRAM modelers are essentially forced to speculate on how "most" of the 44 strategies might be implemented? Draft Chapter 8 (version posted 1/12/06) clearly states that, "when available, other sources have been drawn on to provide an initial assessment of the costs and savings." Proposals with potentially far-reaching consequences for California's economy should not rely on unidentified, secondary sources of supporting data.
- If comprehensive descriptions of strategy implementation used as input to E-DRAM are not available, then the E-DRAM results themselves cannot be viewed as demonstrably credible even on a preliminary basis.

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The combined modeling approach highlights the risk of adopting costly and ineffective strategies.

- The existing analysis strongly indicates that some of the strategies included in the macroeconomic analysis may be very costly and provide little benefit.
- The table below summarizes the draft Chapter 8 macroeconomic impact data from both the version posted 1/5/06 (covering only climate strategies in Table 5-2) and the version posted 1/12/06 (covering climate strategies in both Tables 5-1 and 5-2).

Strategy "Bundle"	2020 Impacts	
	Income ($billion 2005$)	Jobs (Thousands)
5.1 & 5.2 Strategies (1/12/06 posting, Table 8.2)	$4	83
5.2 Strategies (1/5/06 posting, Table 8.2)	-$2	10
Implied 5.1 Strategies Only	$6	73
"Pavley" Impact (1/12/06 posting, page 7, and footnote 1 of this document)	$5	53
Implied 10 Remaining 5.1 Strategies	$1	20

- The very first paragraph of the 1/12/06 version and the second paragraph of the 1/5/06 version both say that the, "results show that the overall impacts of the climate change reduction strategies are expected to be positive." However, the 1/5/06 draft clearly indicates that the impact of the 33 Table 5-2 strategies on income is negative. Either all the 33 Table 5-2 strategies have negative impacts on income or some of the policies have potentially very large negative impacts on income, indicating they are undesirable policies. Further, while the Table 5-2 strategies are reported to have a negative impact on income, they reportedly have a positive impact on jobs. Some explanation of these apparently divergent impacts is needed.
- Additionally, subtracting the impacts of only Table 5-2 strategies (reported in the 1/5/06 posting) from the combined impacts of both Table 5-1 and 5-2 strategies (reported in the 1/12/06 posting) yields a net jobs impact of 73,000 for Table 5-1 strategies only. However, page 7 of the 1/12/06 macroeconomic impact assessment notes that the ARB analysis using E-DRAM concluded that the "Vehicle Climate Change Standards ("Pavley") requirements would add 53,000 jobs. This is almost 75% of the implied positive jobs impacts from the E-DRAM analysis of Table 5-1 strategies.
- More significantly, the 1/12/06 posting does not report the fact that the E-DRAM model[1] assessment of the "Pavley" requirements would boost "income" by over $5 billion. As a result, of the 11 Table 5-1 strategies, a single policy accounts for about 75% of the jobs impact and 80% of the "income" impact.

[1] California Environmental Protection Agency, Air Resources Board; Technical Support Document for Staff Proposal Regarding Reduction of Greenhouse Gas Emissions from Motor Vehicles, *Economic Impacts of Climate Change Regulations,* August 6, 2004. See pages 3, 12, and Table 8 on page 19.

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- Therefore, the other 10 Table 5-1 strategies on a net basis would result in only a 20,000 job impact and a $1 billion "income" impact. This raises the question whether some of these strategies also have a net negative impact on jobs and the state economy.

Text also indicates that Table 5-2 strategies have negative impacts.

- The text in the 1/5/06 posting describing Table 5-2 strategies raises the question whether some or all of the strategies would be cost-ineffective.
- According to the text, the cost of implementing these strategies is $600 million in 2010 with savings of $370 million. This yields a net cost of $230 million.
- According to the text, the cost of implementing the strategies is $5,231 million in 2020 with savings of $5,198 million. This yields a net cost of $33 million.
- Either all the Table 5-2 strategies have costs exceeding benefits or some of these strategies have costs that overwhelm the benefits of other strategies.

Table 5-2 strategies create jobs of the type that lowers overall state income.

- According to the E-DRAM results (shown above), Table 5-2 strategies increase jobs by 10,000 in 2020 but reduce state "income" by $2 billion.
- In effect, each added job costs the state $200,000 per job in lost income. This also means that the jobs being created don't pay as well as the jobs being displaced. This should be a red flag indicating the need for careful analysis of individual climate strategies before their adoption hurts California's economy and citizen's standard of living.

The macroeconomic policy assessment needs to report impacts much more clearly and comprehensively.

- According to the 1/12/05 draft macroeconomic analysis:
  - Climate strategies cost $7.9 billion in 2020,
  - Climate strategies yield savings of $16.9 billion in 2020,
  - For a net savings of $9.0 billion.
  - But the "income" of the economy increases by only $4 billion.
- The Chapter 8 draft highlights the $4 billion increase in income but, in effect, some $25 billion ($7.9 billion plus $16.9 billion) in economic activity is being restructured within the state's economy under the 44 climate change strategies. The macroeconomic analysis needs to comprehensively identify these other impacts. In addition, it is unclear whether capital availability was appropriately determined based on the current global economy. In the current global economy many corporations must make hard choices of whether to invest their capital in places like California or in other areas of the world which may be experiencing significant growth.
- The macroeconomic policy assessment fails to report even basic statistics. The E-DRAM analysis of the "Pavley" strategy (cited above) not only reported jobs and "income" increased, but it also reported that the state's economic output declined compared to the baseline by more than $2 billion in 2020, with a decline of about $5 billion in 2030. We believe that the macroeconomic analysis of the 44 climate strategies must be reviewed as incomplete and flawed, as it did not report the impact on the state's economic output.
- To be credible, the macroeconomic assessment of climate policy needs to comprehensively report impacts, not give the impression of cherry-picking results.

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The recently released "Documentation of Inputs to Macroeconomic Assessment" reveals huge variability of climate strategy cost-effectiveness.

- The document outlining inputs into the E-DRAM model, released only about a week before the January 23 public meeting on the "preliminary" macroeconomic analysis, reinforces the appearance of a regrettable forced-march approach to developing a macroeconomic analysis of the 44 proposed climate strategies.
- Cost-effectiveness, reflecting the cost-per-metric ton of CO2-equivalent emission reduction, is a useful measure for comparing strategies under consideration. However, for many strategies, cost-effectiveness information is missing. This can be seen in the following table summarizing the cost-effectiveness information in the E-DRAM inputs. Of the 44 proposed strategies in Tables 5-1 and 5-2,
    - nine are not included in the detailed E-DRAM inputs listing and presumably were not included in the macroeconomic analysis;
    - eleven strategies do not report cost-effectiveness information;
    - Two of the strategies have reported costs in excess of $250 per metric ton of reduced CO2-equivalent emissions

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Summary of Cost-Effectiveness Data from "Documentation of Inputs to Macroeconomic Assessment"

Table & ("Inputs" Page)	Strategy	Cost-Effectiveness ($/MtCO2e)
5-1 (6)	Vehicle Climate Change Standards	Not Reported
5-2 (9)	Transportation refrigeration Units, Off-Road Elec, Port Elec.	Not Reported
5-2 (11)	Alternative Fuels: Biodiesel Blends	Not Reported
5-1 (14)	Building Energy Efficiency Standards	Not Reported
5-1 (14)	Building Energy Efficiency Standards	Not Reported
5-1 (15)	Fuel-efficient Replacement Tires & Inflation	Not Reported
5-2 (16)	Cement Manufacturing	Not Reported
5-2 (16)	Municipal Utility Energy Efficiency Programs/Demand Response	Not Reported
5-1 (21)	Investor Owned Utility Energy Efficiency Programs	Not Reported
5-2 (29)	Urban Forestry	Not Reported
5-2 (30)	Water Use Efficiency	Not Reported
5-1	Appliance Energy Efficiency Standards	Not Evaluated
5-1	Green Buildings	Not Evaluated
5-1	Hydrogen Highway	Not Evaluated
5-2	Appliance Energy Efficiency Standards	Not Evaluated
5-2	Alternative Fuels - Non-Petroleum	Not Evaluated
5-2	Transportation Policy Implementation	Not Evaluated
5-2	Measures to Improve Transportation Energy Efficiency	Not Evaluated
5-2	Smart Land Use and Intelligent Transportation	Not Evaluated
5-2	Conservation Tillage/Cover Crops	Not Evaluated
5-2 (12)	Alternative Fuels: Ethanol	$ 278.00
5-1 (20)	California Solar Initiative	$ 269.00
5-2 (10)	Semi-Conductor Industry Targets (PFC Emissions)	$ 34.66
5-2 (8)	Other New Light-Duty Vehicle Technology Improvements	$ 28.21
5-2 (10)	Manure Management	$ 25.90
5-1 (26)	Achieve 50% Statewide Recycling Goal	$ 24.47
5-2 (27)	Zero Waste - High Recycling	$ 24.47
5-2 (28)	Forest Management	$ 23.00
5-2 (28)	Fuels Management/Biomass	$ 20.00
5-2 (30)	Afforestation/Reforestation	$ 20.00
5-2 (28)	Forest Conservation	$ 15.00
5-2 (18)	Municipal Utility Electricity Sector Carbon Policy	$ 10.00
5-2 (24)	IOU Electricity Sector Carbon Policy	$ 10.00
5-2 (17)	Municipal Utility Renewable Portfolio Standard	$ 8.73
5-1 (19)	Accelerated Renewable Portfolio Std (33% by 2020)	$ 8.73
5-2 (25)	Enteric Fermentation	$ 3.00
5-2 (26)	Landfill Methane Capture	$ 1.69
5-2 (9)	HFC Reduction	$ 1.46
5-2 (13)	Reducing Venting and Leaks in Oil and Gas Systems	$ 0.33
5-1 (7)	Diesel Anti-idling	$ (50.00)
5-2 (13)	Heavy Duty Vehicle Emission Reduction Measures	$ (113.00)
5-2 (17)	Municipal Utility Combined Heat and Power	$ (113.89)
5-2 (23)	IOU Combined Heat and Power Initiative	$ (113.89)
5-2 (22)	IOU Additional Energy Efficiency Prog/Dem Response	$ (166.98)

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The recently released "Documentation of Inputs to Macroeconomic Assessment" raises questions about the evaluation methods for proposed climate strategies.

- *In credible policy assessment, cost-effectiveness estimates are the end result of a careful analysis. In a disturbing number of instances in the "Documentation," cost-effectiveness appears to be simply a rough assumption leading to savings and implementation cost "data" that are then "input" into E-DRAM to evaluate impacts on the state's economy. For example:*
  - The "Diesel Anti-Idling" strategy (Table 5-1, page 7 of "Documentation of Inputs") analysis starts with a -$50/MtCO2e cost-effectiveness number plus assumed emission reductions for 2010 and 2020. Multiplying these two factors together yields "net cost" figures for 2010 and 2020. Multiplying the emission reductions by the "diesel savings factor" yields the "savings" estimate. Combining the "net cost" and "savings" yields the "implementation cost". The "savings" and "implementation cost" data ($233.30 million and $173.30 million respectively for 2020) are then used as input to E-DRAM. This sequence of calculations is exactly backwards from that which should occur under careful policy assessment.
  - This apparent sequence of calculations leading to the inputs to E-DRAM creates at a minimum the unfortunate appearance, if not a real issue, of whether the inputs to E-DRAM are the credible results of careful analysis, or basically guesses. As a result, it raises questions about the credibility of the current E-DRAM macroeconomic impact results.
- *Are there significant errors in the calculations leading to E-DRAM inputs?*
  - The Alternative Fuels: Biodiesel Blends" strategy (Table 5-2, page 11 of "Documentation of Inputs") analysis appears to contain a very serious error (even assuming the underlying inputs have merit) that seriously understates the implementation cost of the biodiesel blend strategy.
  - According to this analysis, biodiesel cost equals a gasoline cost ($1.73/gal) plus a "Tellus incremental cost" ($.23/gal) for a total of $1.96/gal.
  - Following this logic, the 2020 price of biodiesel for E-DRAM should be the 2020 price of gasoline ($2.07/gal) plus the "Tellus incremental cost" of $.23/gal, for a total of biodiesel blend cost of $2.30/gal. This would be $.29/gal more than the E-DRAM 2020 price of diesel ($2.01/gal, see page 3 of "Documentation"). This price difference ($.29/gal) should be the basis for the implementation cost estimate for E-DRAM.
  - Instead, the implementation cost used as an E-DRAM input for 2020 is listed as zero because the original Tellus biodiesel cost is $0.05/gal less than the assumed 2020 diesel price. This is a flawed, inaccurate comparison.
  - If the original logic of the incremental cost of bio-diesel is followed consistently, the 2020 implementation cost of the biodiesel blend strategy should be $28.8 million ($0.29/gal times 99,233,816 gallons), not the $0 million used as input to E-DRAM.

Note – See the Biofuels section below for additional comments on analysis errors

Does E-DRAM systematically overestimate California economic benefits because equipment used to meet the implementation requirements will be met by imports and not California produced equipment??

- The annual "implementation costs" identified in the "Documentation of Inputs" total just under $8 billion for 2020, a not insignificant amount. In a model like E-DRAM, these implementation expenditures boost the state's economy only if they lead to increased in-state production and sales which in-turn boosts employment and personal income. This linkage drives the E-DRAM macroeconomic impact results.
- However, if implementation expenditures lead to increased purchases from out-of-state or out-of-country businesses, then the implementation expenditures do little if anything to boost in-state businesses and employment.
- This is a potentially significant issue with E-DRAM for two reasons.
    - First, as noted in E-DRAM model documentation, "The level of imports and exports are singularly the weakest and least-supported data of SAM [the "social accounting matrix" that tracks in-state economic activity]. [2] Because of this, the ability of E-DRAM to accurately assess the impact of specific categories on import-purchases is questionable.
    - Second, many of the "big-ticket" strategies arguably appear to heavily involve out-of-state purchases. This could also be true for other strategies as well.
        - By themselves, the two new vehicle climate strategies account for almost $2.7 billion in implementation cost expenditures[3] in 2020 – a large share of the $8 billion in total expenditures. A large portion of these expenditures likely reflects the increased cost of vehicles or vehicle parts imported into California. These imports negate some or all of positive impacts that strategy implementation cost expenditures might have on the California economy.
        - The strategy with the next largest implementation 2020 cost is Alternative Fuels: Ethanol. Unless the ethanol for this strategy is grown entirely in California using California made raw materials (like fertilizer), then a substantial portion of the $644 million in 2020 implementation costs will go largely to increased imports into California. Again, use of imports would negate economic and jobs benefits from this implementation cost expenditure.
    - *Unless the E-DRAM modeling can identify and document what share of each strategy's implementation costs results in in-state expenditures, as opposed to increased imports from other states or countries, then the positive economic impacts of the implementation costs could well be significantly overstated.*

Overall, the potential effectiveness of the California program is harmed by the inclusion of strategies that are excessively costly or that have poorly documented implementation strategies.

- The draft Chapter 8 makes it clear that policymakers are focusing on "the overall impacts of climate change emission reduction strategies." [4] However, the

[2] University of California at Berkeley, "The Economy-Wide Effects of Large-Scale Air Pollution Control Regulations", Contract Number 00-321, prepared for the California Air Resources Board and the California Environmental Protection Agency, June 2005.

[3] About $1.2 billion from the Table 5-1 Vehicle Climate Change Standards and over $1.4 billion in expenditures from the Table 5-2 strategy on Other New Light-duty Vehicle Technology Improvements. See "Documentation of Inputs to Macroeconomic Assessment of the DRAFT Climate Action Team Report to the Governor and Legislature."

[4] See page 1, second paragraph of January 5 posted draft chapter 8 or page 1, first paragraph of the January 12 posted draft chapter.

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inclusion of costly, inefficient strategies in a large package of policies inevitably reduces the overall effectiveness of efforts to address climate change issues.

- Strategies with high costs impose an unnecessary burden on California consumers. They also create uncompetitive conditions for California businesses and negatively impact the overall economy. In the long term, these conditions will be detrimental to the effort to address climate change.

Mandatory Emissions Reporting

WSPA members have differing views on the issue of whether mandatory reporting is an essential and appropriate element of a state GHG reduction program. We are concerned, however, to read in the CAT report that mandatory reporting will allow the governor's targets to be translated into a statewide emissions cap for the 2010 and 2020 timeframes, and will lay the foundation for a cap and trade program. The report should be revised to decouple the reporting element from the cap/cap and trade element as a first step in more constructive dialogue with statewide interests.

Public Goods Charge for Transportation

The report recommends imposition of a Public Goods Charge for Transportation in order to reduce petroleum dependence, and goes on to say that over-dependence on petroleum fosters undesirable geopolitical, economic, energy, and environmental consequences. The Public Goods Charge is proposed on petroleum to be potentially used to encourage fuel diversity, port emissions, etc. The report states that if implemented in parity with electricity PCG, it would be a 2.57 cents a gallon charge on gasoline or diesel at the wholesale level.

WSPA opposes the Public Goods Charge as written. It is unclear what the PGC will apply to, who will pay the charge, what it will fund, how the amount will be determined, or how it will be controlled. California already has one of the highest gasoline taxes in the country – approximately 60 cents per gallon. The additional charge will push Californians to pay the highest gasoline taxes in the nation. The hundreds of millions of dollars this "Charge" (which is really a tax) is expected to generate, will create a regressive tax aimed at low-income families and seniors who can least afford such an increase in fuel tax.

In addition, the tax will unfairly burden California businesses. It will increase operating costs for all agricultural, manufacturing, and retail enterprises. This in turn, will put upward pressure on the prices consumers pay for all essential goods and services.

Moreover, what will these tax revenues fund? There is a claim in the report that the revenues should be used to provide incentives for individuals to develop emission reductions technologies for use in California and abroad.

Providing state funds so that companies can profit from endeavors abroad doesn't appear to be good public policy for California. Also, there is no guarantee the taxes would be spent on any projects related to transportation. Just as likely, the tax dollars could be used for special interest government projects or shifted into unrelated areas since there are no accountability mechanisms apparent in the report.

Energy Efficiency

WSPA supports energy efficiency policies and practices as long as they are cost-effective. Our companies have already instituted many energy efficiency measures at our facilities already and will continue to do so irrespective of any state program, merely because it is good business.

Bio-fuel Mandates and Alternative Fuels

WSPA strongly disagrees with the inclusion of bio-fuels mandates in the list of "strategies needed to meet California's targets". Table 5-2 outlines expected reductions in millions of tons of CO2 equivalent emissions, and clearly shows that bio-diesel blends and ethanol would provide minimal GHG reductions for both the short and long-term. Again, we believe the calculations contain errors as well, and an example has been provided below.

The macroeconomic report has a table indicating that bio-diesel will provide a 78% reduction in GHG's. We question what the specific baseline or point of comparison is that the consultant used, since the report states that conventional diesel was the baseline. This is an inappropriate comparison since California has had its own cleaner CARB-adopted diesel formulation for many years now so this formulation should be the baseline instead.

In addition, "bio-diesel" can be defined as anything from B2 to B100. And, since the report recommends very low levels of bio-diesel blends (B1 to B4), it is nonsensical to project a 78% reduction in GHG's, since the majority of the fuel will not be actual bio-diesel.

Further, since bio-diesel is manufactured from a wide variety of feedstocks, this means a wide range of GHG effects is created. Based on this fact, a range of projected reductions would be a much more accurate approach to use in the table and in the analysis.

Bio-diesel: The emission reductions assigned to bio-diesel assume 1-4% bio-diesel is required in the 2010 timeframe and that 20% B4 is in place by 2020. The report then mentions this is contingent on sufficient bio-diesel supply being available. Arbitrary government mandates on bio-diesel is not a concept WSPA supports, and we believe this kind of market intervention can have serious unintended consequences.

WSPA will not speculate on whether sufficient supply will be available. However, there are many issues that need to be addressed regarding bio-diesel beyond the singular focus on GHG reduction. These include issues such as:

- Potential increases in NOx and certain air toxics emissions
- Lower energy content
- Quality assurance and need for standards
- Stability, storage and distribution problems
- High potential for adverse effects on fuels systems and engines that will cause operating problems.
- Warranty issues

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Ethanol: Unlike bio-diesel, ethanol at low concentrations has been utilized in the fuel system for many years. There remains, however, a large number of concerns about the implementation of a higher mandated amount of ethanol – the report discusses the potential of blends up to E-85.

While WSPA is not, in any way, attempting to or even able to forecast future ethanol supplies, a very possible consequence of a California ethanol mandate is that it could create supply problems. Federal requirements will ramp up the demand nationwide for ethanol in the next few years. If mandated ethanol were in short supply, the supply of finished product would likewise be in short supply since it could not be sold without the renewable component. Thus, an additional mandate could compound rather than alleviate a market disruption caused by supply failure. In other words, it creates another link in the supply chain that could break. In addition, the federal law contains no geographical restrictions as to where renewables (ethanol) could be blended. That geographical flexibility is important; any additional state mandate serves to reduce flexibility and complicate supply considerations.

As indicated in the draft report, hydrocarbon permeation is a significant problem when ethanol is added to gasoline. The effects of increased ethanol concentrations on permeation need to be fully evaluated before committing to increased levels of ethanol. The Coordinating Research Council is currently conducting additional, relevant testing of permeation factors. These results will need to be considered before making any conclusions about increased levels of ethanol.

Many of the issues of concern to our industry with increased percentages of ethanol are identical to the bio-diesel issues mentioned above. And, there are additional concerns such as liability and consumer problems related to misfuelling and commingling. Multimedia evaluations should be completed on both these fuels.

Alternative fuels: Listed under the CEC portion of the table is a TBD entry under "Alternative Fuels". We believe this adds duplication to the table and includes a very unsatisfactory description of what the proposed measure(s) is.

In the detailed report write up there is mention this entry could include any of a suite of proposals. These include: technical performance standards; financial incentive; negotiated agreements; voluntary commitment; emissions intensity benchmarking for fuel producers or auto manufacturer; or other mandatory measures such as fuels or motor vehicle standards or a cap and trade program. The report goes on to say that some alternative fuels have GHG reductions but face economic, market or regulatory barriers that are impeding their use.

This late addition of the CEC alternative fuel measure appears to be an attempt to include an IEPR item under the GHG forum as an additional avenue for implementing the state's agenda on petroleum reduction, while claiming a GHG benefit. It is unclear how this possible suite of alternative fuel measures relates to the bio-diesel and ethanol measures – both of which are alternative fuels.

There is additional inappropriate rationale included in the report stating that alternative fuels constrain the rate of price increases. If the report's goal is to constrain fuel price increases rather than reduce GHG emissions, then a very different analysis needs to be conducted. No evidence has been presented to prove that alternative fuels will be comparatively cheaper in the future.

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Caps

WSPA is opposed to California-only caps or any kind of rationing of energy sources. Although the report mentions that a decision on a state cap and trade program has not been made yet, the report spends a significant amount of time discussing how a cap and trade program would benefit the state and discusses the two alternatives for defining the scope of a program.

We do support the principles of flexibility in emission reductions options in general, as well as a national approach to address global climate change. However, our industry membership is not supportive of a California cap approach.

Oil and Gas Venting and Leaks

WSPA notes there is a proposed measure targeting reduced venting and leaks from oil and gas operations. Our companies believe the potential fugitive emissions reductions attributed to our upstream operations may be overstated and/or insignificant since, unlike other areas of the nation, California oil and gas facilities have very stringent district regulations that significantly minimize or eliminate these types of emissions. We believe this section needs further clarification, and perhaps elimination if found to be not applicable to the California situation.

Port Electrification

WSPA questions the addition of this measure in the CAT report – particularly with the wide extent of port programs being developed and the potential for the CAT effort to create problems or conflicts with those efforts. The CAT report's contention is that 25% of the ships by 2020 will use shore side power as a GHG reduction measure.

Shore side power is but one of a suite of measures being considered by various entities for the ports' generic air pollution reduction programs. There are efforts underway to institute a flexible trading mechanism, which would allow sources to select compliance options and to utilize a port or region wide approach. The state must be very careful to ensure that any GHG reduction strategies do not conflict with these efforts to deal with a complicated situation.

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